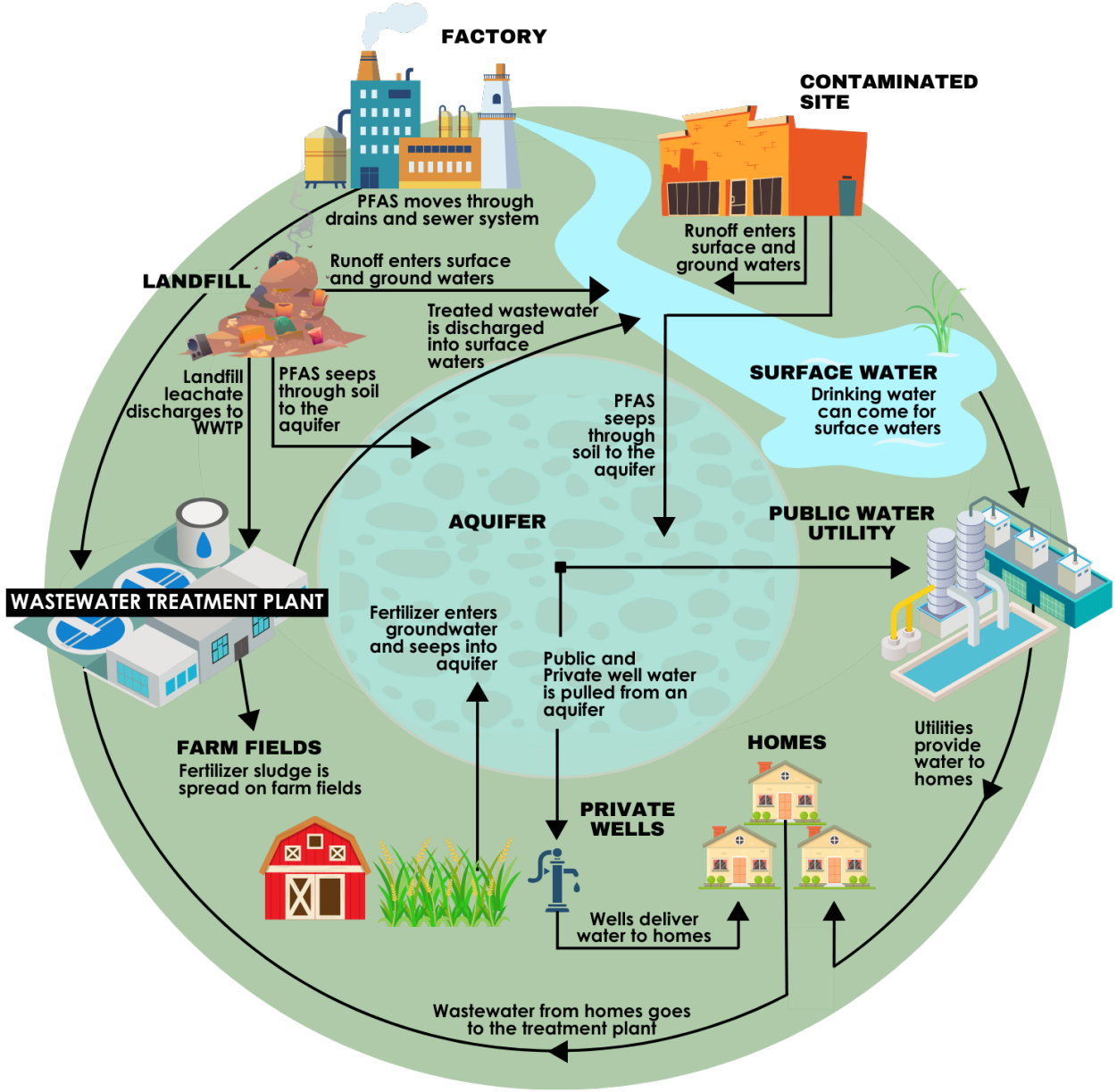
WATER
RESOURCE
MANAGEMENT

DWQ's Strategy: Addressing PFAS in Wastewater

Susan Rosenwinkel |Director-
Division of Water Quality

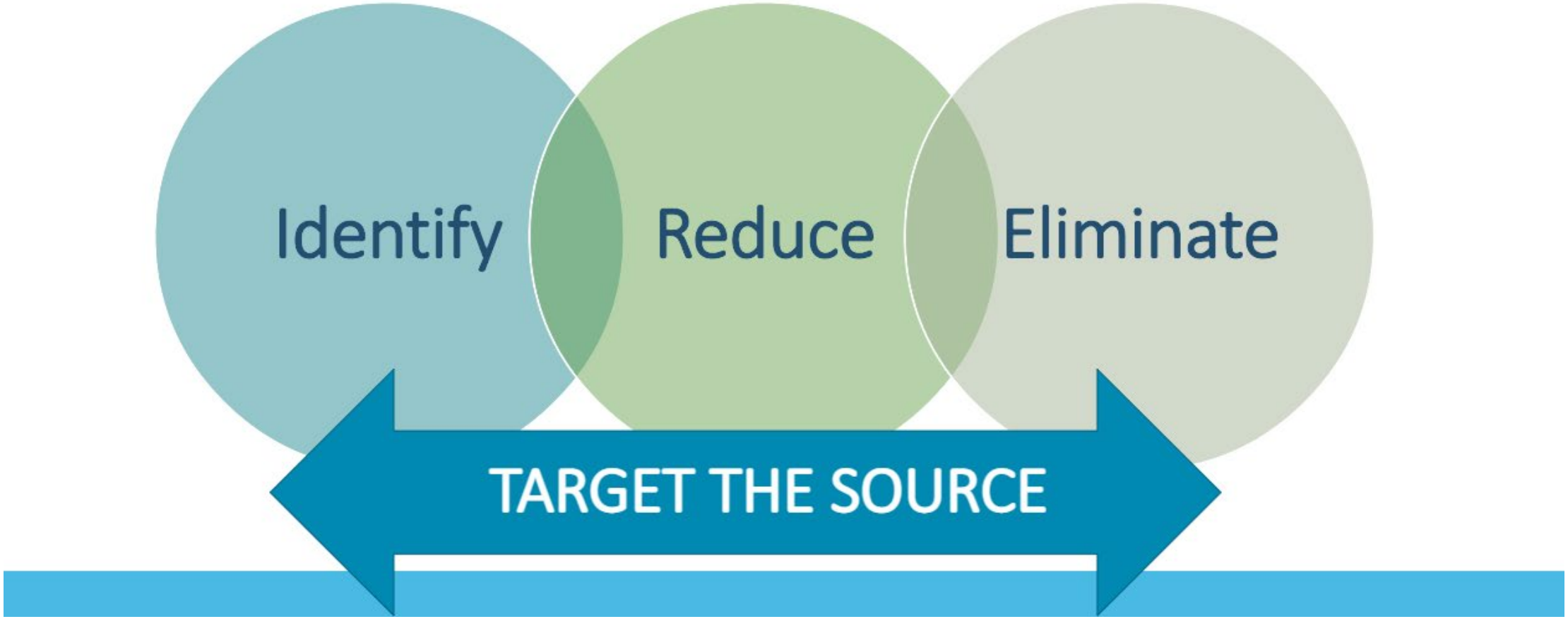
Clean Water Council Public Hearing
December 17, 2024

PFAS Water Cycle



ADDRESSING **PFAS** IN WASTEWATER

DWQ PFAS Approach



DWQ PFAS STRATEGY - Surface Water & Pretreatment

Division of Water Quality PFAS Strategy:

Identify, Reduce, and Eliminate sources of PFAS

On January 17, 2023, the Commissioner signed Administrative Order 2023-01 to encourage the collection of data that will aid in efforts to identify, reduce and eliminate sources of PFAS in wastewater and its residuals.

Discharge to Surface Water and Pretreatment Permits

Read more

Discharge to Ground Water Permits

Read more

Residuals, Biosolids, and Sewage Sludge Permits

Read more

PFAS Data Collection

Read more

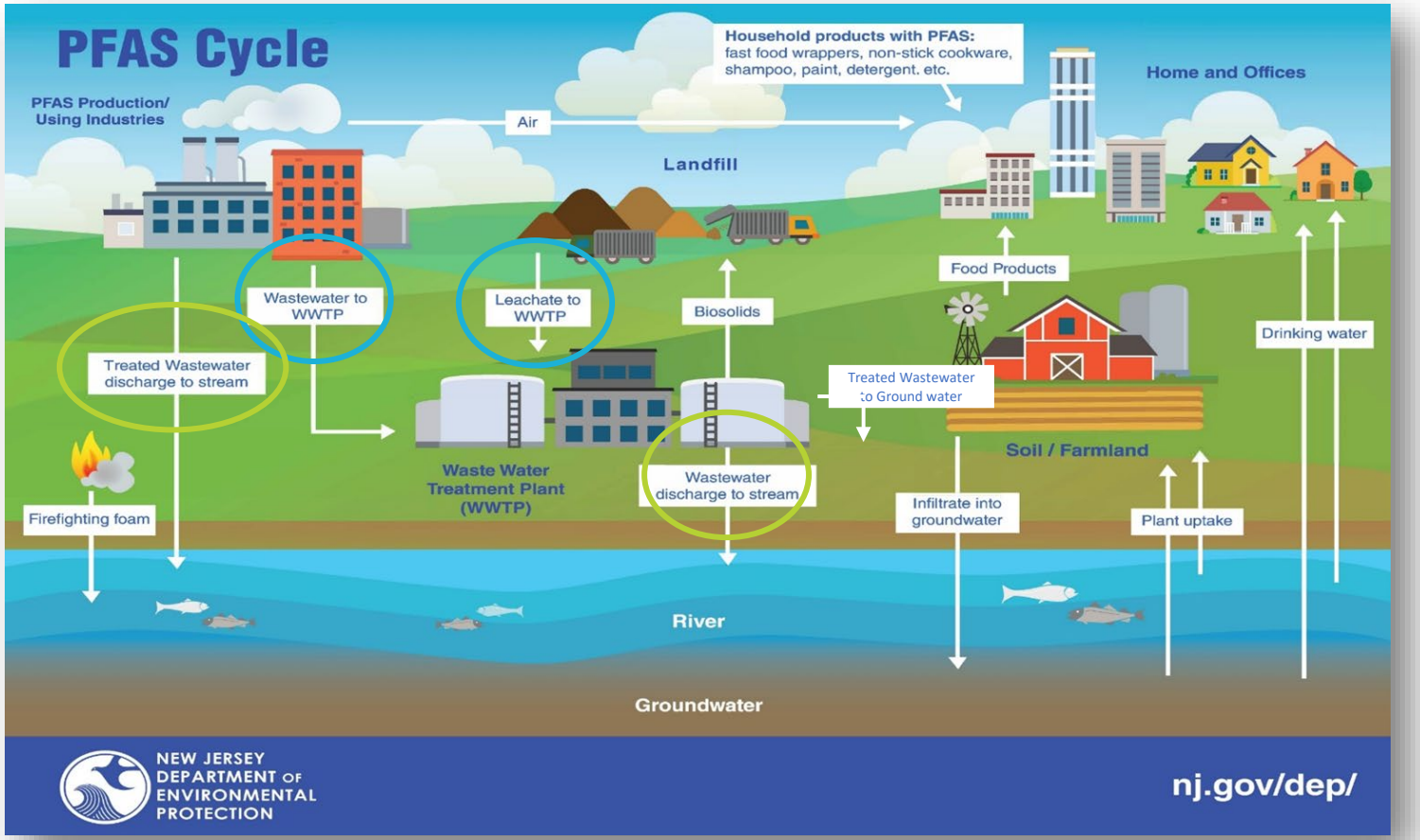
DEP PFAS

Read more

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

https://www.nj.gov/dep/dwq/pfas.htm

Surface Water and Pretreatment



- **Surface Water**
  - Industrial Facilities discharging treated wastewater directly to Surface Water
- **Pretreatment**
  - Industrial facilities discharging wastewater to a POTW
  - Industrial facilities regulated by a Delegated Local Agency

Surface Water and Pretreatment
FACTORS CONSIDERED

- **Publicly Owned Treatment Works (POTWs) do not typically use or generate PFAS**
- **Conventional Treatment Technology is not designed to remove PFAS**
- **Treatment technology for PFAS at POTWs may not be viable at this time**
- **Treatment technologies for POTWs is emerging, but more research is needed**

TARGET THE SOURCE

Surface Water and Pretreatment
PFAS COMPOUNDS FOR MONITORING

Short Chain PFAS

- **C4** : Perfluorobutanoic acid (PFBA)*
- **C5** : Perfluoropentanoic acid (PFPeA)*
- **C6** : Perfluorohexanoic acid (PFHxA)
- **C7** : Perfluoroheptanoic acid (PFHpA)
- **C4-S** : Perfluorobutanesulfonic acid (PFBS)
- **C6-S** : Perfluorohexanesulfonic acid (PFHxS)
- **GenX** : Hexafluoropropylene oxide dimer acid(HFPO-DA)**

Long Chain PFAS

- **C8** – Perfluorooctanoic acid (PFOA)
- **C9** – Perfluorononanoic acid (PFNA)
- **C10** – Perfluorodecanoic acid (PFDA)
- **C11** – Perfluoroundecanoic acid (PFUnA)
- **C12** – Perfluorododecanoic acid (PFDoA)
- C13 – Perfluorotridecanoic acid (PFTriA)
- C14 – Perfluorotetradecanoic acid (PFTeA)
- C8-S – Perfluorooctanesulfonic acid (PFOS)

Most Frequent PFAS Compounds Detected	Perfluorohexanoic acid (PFHxA) C6 Perfluoroheptanoic acid (PFHpA)C7 Perfluorooctanoic acid (PFOA)C8

DWQ PFAS STRATEGY – Data Collection

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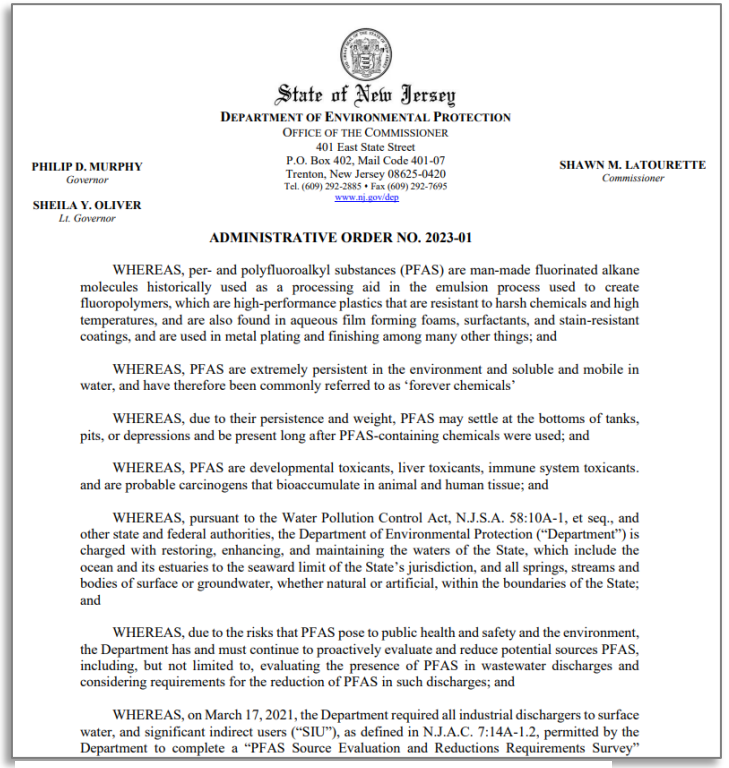
TARGET THE SOURCE

IDENTIFY → REDUCE → ELIMINATE

On January 17, 2023, NJDEP Commissioner Shawn LaTourette issued Administrative Order 2023-01 to encourage the collection of data that will aid in the Department's efforts to identify, reduce and eliminate sources of PFAS in wastewater and its residuals.

Administrative Order has been posted on the DWQ PFAS webpage: https://www.nj.gov/dep/dwq/pfas.htm



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PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

SHAWN M. LATOURETTE
Commissioner

ADMINISTRATIVE ORDER NO. 2023-01

WHEREAS, per- and polyfluoroalkyl substances (PFAS) are man-made fluorinated alkane molecules historically used as a processing aid in the emulsion process used to create fluoropolymers, which are high-performance plastics that are resistant to harsh chemicals and high temperatures, and are also found in aqueous film forming foams, surfactants, and stain-resistant coatings, and are used in metal plating and finishing among many other things; and

WHEREAS, PFAS are extremely persistent in the environment and soluble and mobile in water, and have therefore been commonly referred to as 'forever chemicals'

WHEREAS, due to their persistence and weight, PFAS may settle at the bottoms of tanks, pits, or depressions and be present long after PFAS-containing chemicals were used; and

WHEREAS, PFAS are developmental toxicants, liver toxicants, immune system toxicants. and are probable carcinogens that bioaccumulate in animal and human tissue; and

WHEREAS, pursuant to the Water Pollution Control Act, N.J.S.A. 58:10A-1, et seq., and other state and federal authorities, the Department of Environmental Protection ("Department") is charged with restoring, enhancing, and maintaining the waters of the State, which include the ocean and its estuaries to the seaward limit of the State's jurisdiction, and all springs, streams and bodies of surface or groundwater, whether natural or artificial, within the boundaries of the State; and

WHEREAS, due to the risks that PFAS pose to public health and safety and the environment, the Department has and must continue to proactively evaluate and reduce potential sources PFAS, including, but not limited to, evaluating the presence of PFAS in wastewater discharges and considering requirements for the reduction of PFAS in such discharges; and

WHEREAS, on March 17, 2021, the Department required all industrial dischargers to surface water, and significant indirect users ("SIU"), as defined in N.J.A.C. 7:14A-1.2, permitted by the Department to complete a "PFAS Source Evaluation and Reductions Requirements Survey"

PFAS Data Collection

Home / PFAS / **PFAS Data Collection**

The Division of Water Quality has created the tools below to facilitate the collection of PFAS data from treatment entities across New Jersey. This will aid in the efforts to identify, reduce, and eliminate sources of PFAS in wastewater and its residuals. DWQ encourages the submission of data to help gain a better understanding of PFAS sources.

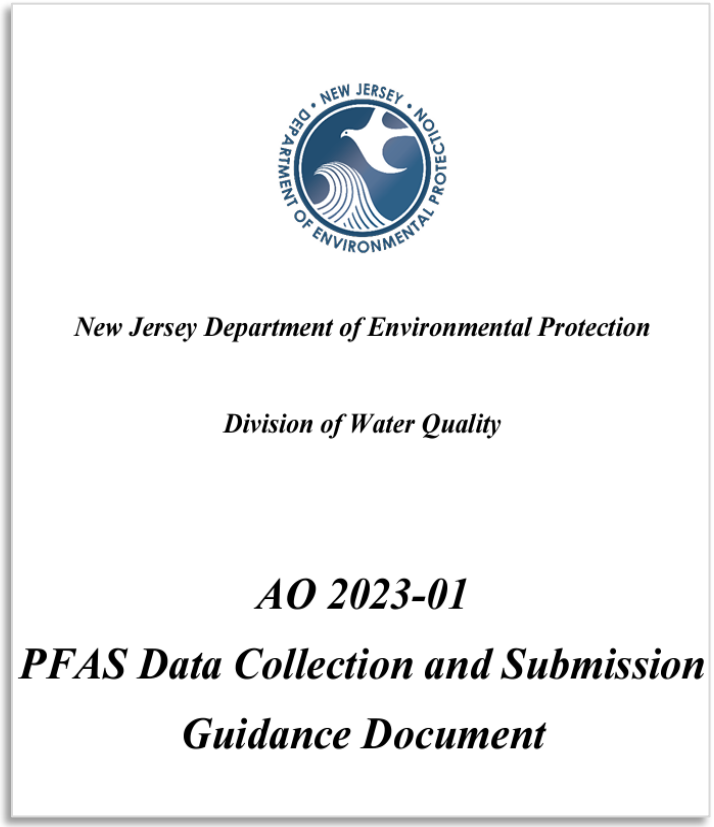
On January 17, 2023, the Commissioner signed Administrative Order 2023-01 to encourage the collection of data.

Resources

- PFAS Data Entry Template
- PFAS Data Collection and Submission Guidance Document

PFAS Data Collection

Data Collection and Submission Guidance



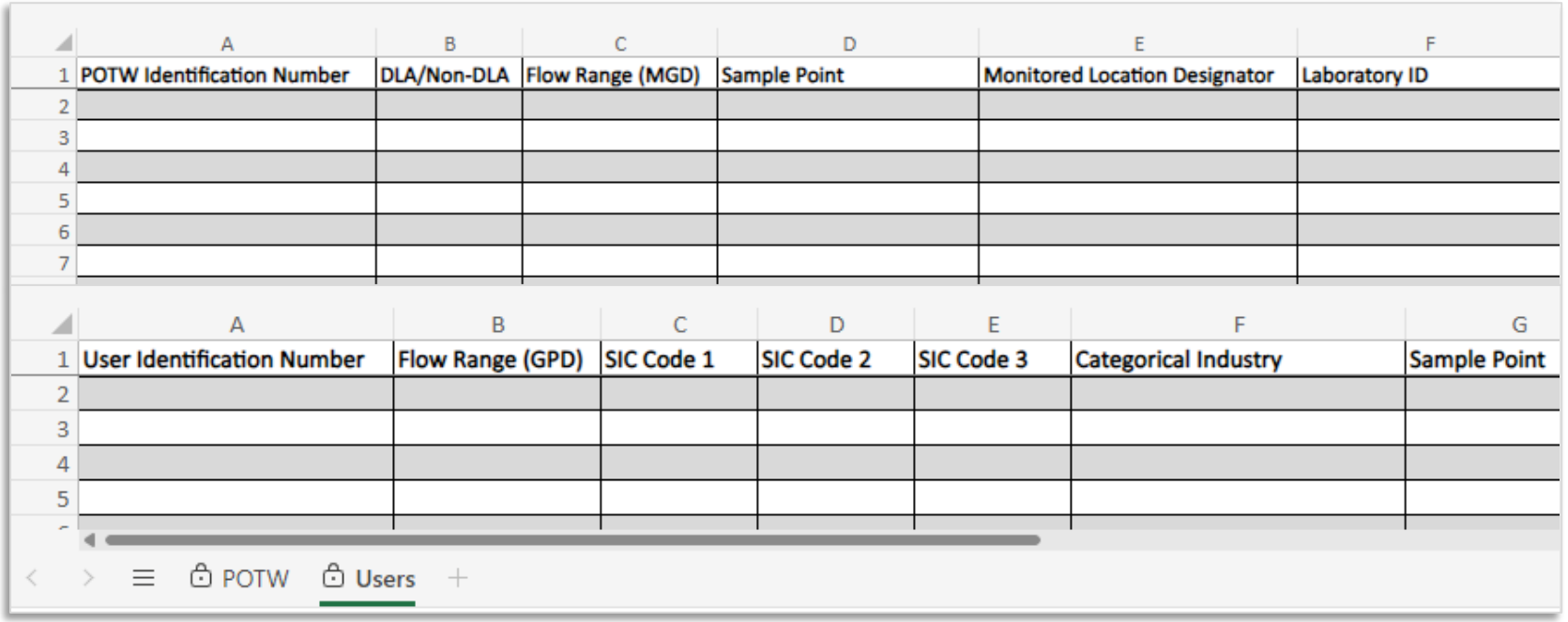
New Jersey Department of Environmental Protection

Division of Water Quality

AO 2023-01

PFAS Data Collection and Submission Guidance Document

Data Entry Template



	A	B	C	D	E	F
1	POTW Identification Number	DLA/Non-DLA	Flow Range (MGD)	Sample Point	Monitored Location Designator	Laboratory ID
2						
3						
4						
5						
6						
7						

	A	B	C	D	E	F	G
1	User Identification Number	Flow Range (GPD)	SIC Code 1	SIC Code 2	SIC Code 3	Categorical Industry	Sample Point
2							
3							
4							
5							

POTW Users

https://dep.nj.gov/wp-content/uploads/dwq/pdf/pfas/potw-and-users-template.xlsx

DWQ PFAS STRATEGY – Ground Water

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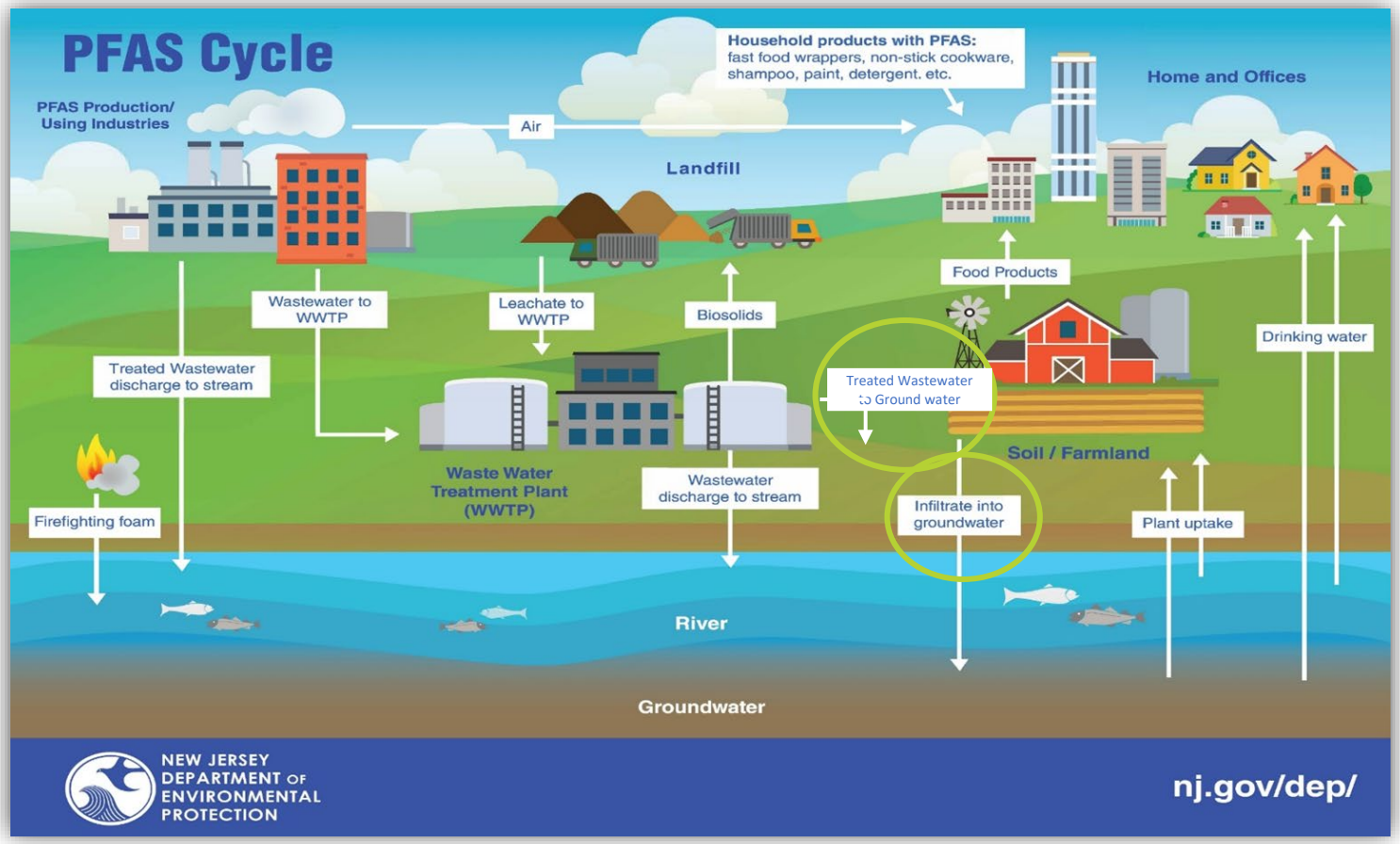
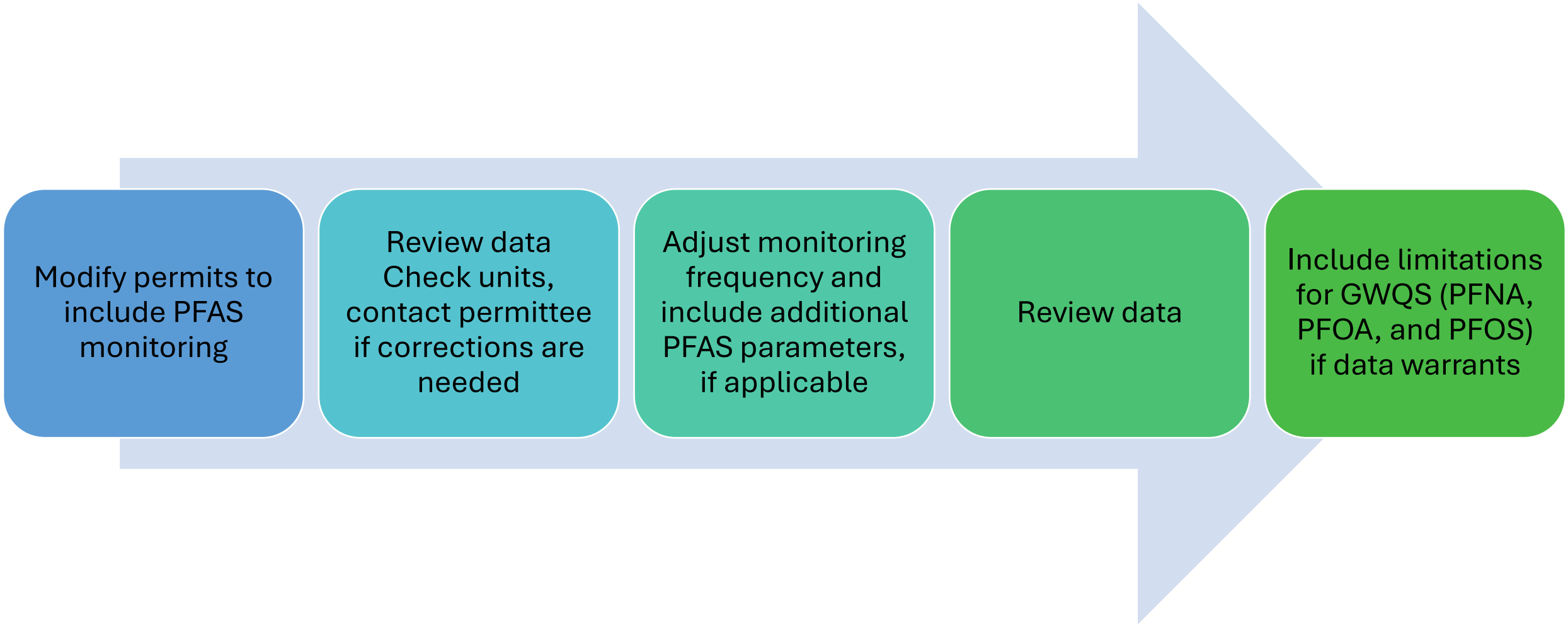
Ground Water



- **Ground Water**
  - Industrial facilities discharging treated wastewater ground water
  - Sanitary facilities discharging greater than 100,000 gpd

Ground Water - PFAS APPROACH



PFAS STANDARDS: Ground Water

Groundwater PFAS Standards:

Analyte	Standard	Adopted
PFNA	13 ppt	January 16, 2018
PFOA	14 ppt	June 1, 2020
PFOS	13 ppt	June 1, 2020

THANK YOU

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ENVIRONMENTAL
PROTECTION